

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/IL05/000303

International filing date: 17 March 2005 (17.03.2005)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/602,636
Filing date: 19 August 2004 (19.08.2004)

Date of receipt at the International Bureau: 09 June 2005 (09.06.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse

PCT/IL 2005 / 000303

25 MAY 2005

PA 1312523

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

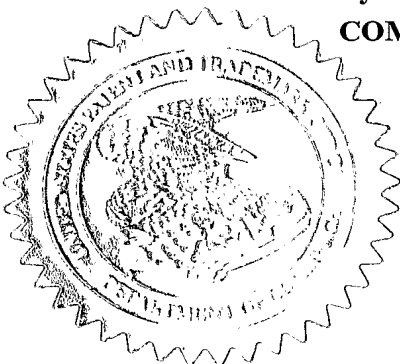
April 29, 2005

**THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM
THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK
OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT
APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A
FILING DATE UNDER 35 USC 111.**

APPLICATION NUMBER: 60/602,636

FILING DATE: August 19, 2004

**By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS**



L. Edelen

**L. EDELEN
Certifying Officer**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No.

22264
60/602636
081904**INVENTOR(S)**

Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
ELAN	ZIV MD	RAMAT-GAN, ISRAEL

Additional inventors are being named on the _____ separately numbered sheets attached hereto

TITLE OF THE INVENTION (500 characters max)

A CIRCUMFERENTIAL RING FOR LIMITING INWARD MOVEMENT OF AN
 APPLICATION FOR INSERTION OF
 TAMPONS, VARIOUS VAGINAL
 DEVICES AND INTRA-VAGINAL DRUGS

Direct all correspondence to:

CORRESPONDENCE ADDRESS☐ Customer Number:

OR

☐ Firm or
Individual Name

DR. ELAN ZIV MD

Address 8 HAILANOT STREET

Address GIVAT HAROSHIM

City RAMAT GAN

State

ISRAEL

Zip

52648

Country ISRAEL

Telephone

+972-3-736966

Fax

+972-3-736963

ENCLOSED APPLICATION PARTS (check all that apply)

<input checked="" type="checkbox"/> Specification Number of Pages	4	<input type="checkbox"/> CD(s), Number	
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets	1	<input type="checkbox"/> Other (specify)	
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76			

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT

<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.	FILING FEE Amount (\$) <div style="border: 1px solid black; padding: 10px; text-align: center;">\$ 80</div>
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees.	
<input type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: _____	
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.	

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

<input checked="" type="checkbox"/> No.
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____

[Page 1 of 2]

Respectfully submitted,

Date 11.8.04

SIGNATURE

M Z

REGISTRATION NO. _____

(if appropriate)

Docket Number: _____

TYPED or PRINTED NAME DR. ELAN ZIV MD

TELEPHONE +972-52-356928

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)
80

Complete if Known

Application Number

Filing Date

First Named Inventor

Dr. ELAN ZIV

Examiner Name

Art Unit

Attorney Docket No.

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☐ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☐ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	80

SUBTOTAL (1) (\$)
80

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

Name (Print/Type)

Dr. ELAN ZIV

Registration No.
(Attorney/Agent)

(Complete if applicable)

Telephone 792-82-356928

Signature

Dr. Ziv

Date

15.8.04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

A CIRCUMFERENTIAL RING FOR LIMITING INWARD MOVEMENT OF AN APPLICATOR FOR INSERTION OF TAMPONS, VARIOUS VAGINAL DEVICES AND INTRAVAGINAL DRUGS

5 The present invention relates generally to the field of intra- vaginal treatment of various conditions, such as infections, urinary incontinence, etc., in female patients. More specifically, the present invention relates to a vaginal applicator, intended for the correct placing of tampons, drugs, devices, etc., within the vaginal cavity.. The invention describes a vaginal applicator which is inserted in a no-self-touch technique, up to a
10 certain point in the vagina, with a circumferential ring marking the limit for insertion.

Inventor: Dr Elan Ziv, MD OBGYN, Urogynecologist

Background of the Invention

15 There are instances in medicine, in which a device should be applied into the vagina, but to a certain depth only, while retaining the full length of the applicator. In the case of vaginal devices used to treat urinary incontinence, it is imperative that one end of the device should be placed just under a predefined location within the vagina, such as the bladder neck or mid urethra. The device is inserted with an applicator, having its own
20 length which cannot be altered, thereby its extreme necessity to be accurate in its vaginal positioning. The exact positioning directly affects the efficacy of the device.

One possibility of solving the problem is by shortening the device and the applicator to the desired length, thereby a full insertion of the applicator (as is done with the insertion of a menstrual tampon) is performed. In some cases that solution is not applicable, hence
25 the need to mark the site which the application process should be stopped. One such possibility is by drawing a mark on the applicator which will instruct the user regarding the depth of insertion. Disadvantage of such method is by the fact that the user should be alert to the sign, and might miss it or forget to look for it. Another possibility is to add a raised mark on the applicator, so that the user's fingers are in direct contact with that
30 raised area, preventing the wrong length insertion of the applicator. That raised area could be a roughened area or a set of lines or a circumferential ring.

"A circumferential ring for limiting inward movement of a vaginal applicator for insertion of tampons, vaginal devices, and drugs"

Dr Elan Ziv, MD OBGYN, Urogynecologist

Page 1 of 4

While insertion of the applicator into the vagina, the user's fingers are held behind the ring, thereby marking the point for no further insertion. This will allow for a no-self-touch technique of insertion.

5 With different devices, for different intended uses, the ring should be placed in a different location along the applicator, as decided for this intended use. Dimensions of the ring might also alter according to intended use and to manufacturer's desire.

10 In some cases, the limiting ring might be part of the original molding by which the applicator was designed or manufactured. It is also possible to design an external body which will be fitted on top of the existing applicator, with the ring at the pre-defined dimensions and length from the margins. Such an external body may be made of a soft material such as silicone, or in some cases- of a harder material, such as polyethylene.

The Invention

The present invention provides a means for controlling the depth of insertion of an applicator in order to place a vaginal device or drug into the predetermined proper position. One such condition for use is the intra-vaginal device for the treatment of urinary incontinence in females. When involuntary urination occurs, it is usually the result of the abnormal descent of the bladder neck and the urethra into a low position, away from the intra-abdominal pressure system. This "hypermobility" is the result of some injury to the support mechanism which normally keeps the urethra and the bladder neck in a raised position, along the backside of the pubic bone. The lowering of the bladder neck and the urethra that occur, for example, when a woman coughs, sneezes, or laughs, causes involuntary leakage of urine. The present invention is designed so as to provide a solution for putting a device exactly at the right spot where it should be in order to function correctly.

The invention will now be described with reference to accompanying drawing:

FIG. 1 is a side view of the applicator with the limiting ring.

The opening of the applicator (1) is located at the front side of the applicator, the first to be inserted. The body of the applicator (2) contains the tampon or the device or the drug to be applied into the vagina. The plunger (8) is designed to push the tampon or device or drug through the opening (1) into the vagina.

The limiting ring (4) is located at a predetermined length from opening (1). It might be part of the body of the applicator (2) or as a part of an external body (6) fitted externally on the body of the applicator (2)

Way of use:

The user inserts front edge of the applicator (1) into the vagina, gently pushing the body (2) inside until her fingers, located caudal to the limiting ring (4) come into touch with the external side of the labia. She then holds, and pushes the plunger (8) forward so as to push the inner content of the applicator into the vagina. The tampon or device is now in the right position and the applicator is disposed.

"A circumferential ring for limiting inward movement of a vaginal applicator for insertion of tampons, vaginal devices, and drugs"

Dr Elan Ziv, MD OBGYN, Urogynecologist

Page 3 of 4

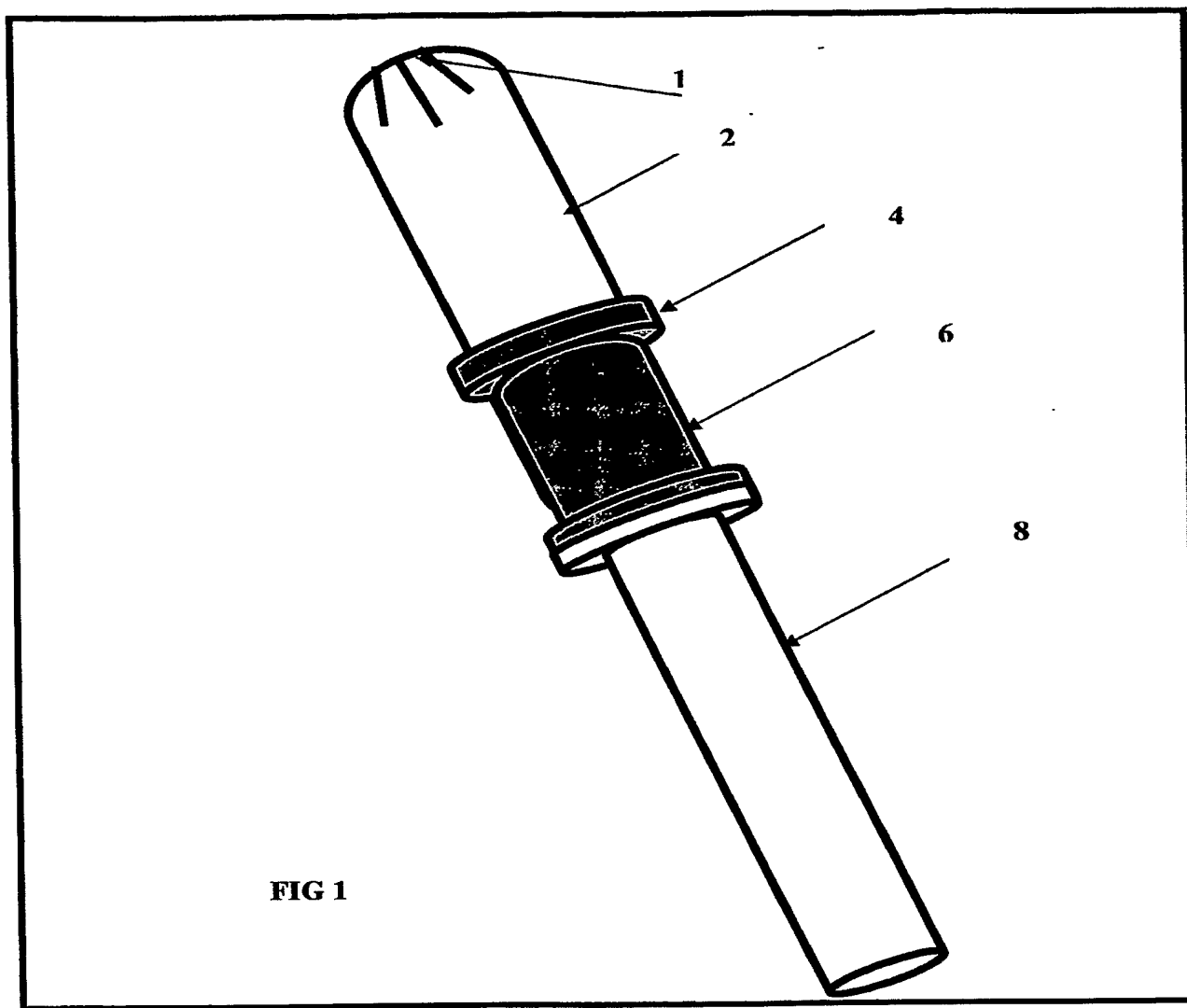
Alternative embodiments of the invention:

- It may be manufactured in different sizes
- It may be made of many flexible materials, such as silicone, polyurethane, etc.
- It may be made of several colors
- The applicator may be originally designed with the ring
- Length from the opening of the applicator may vary
- The invention may be used for other orifices in the body, such as the rectum, etc.

"A circumferential ring for limiting inward movement of a vaginal applicator for insertion of tampons, vaginal devices, and drugs"

Dr Elan Ziv, MD OBGYN, Urogynecologist

Page 4 of 4



"A circumferential ring for limiting inward movement of a vaginal applicator for insertion of tampons, vaginal devices, and drugs"
Inventor: Dr Elan Ziv, MD OBGYN, Urogynecologist
Page 1 of 1

